

OKLAHOMA MONTHLY CLIMATE SUMMARY

OCTOBER 2002

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Oklahoma Climatological Survey

MONTHLY SUMMARY FOR OCTOBER 2002

October 2002

*Statewide average temperature = 56.7° F
Statewide average rainfall = 5.15 inches*

Oklahoma's chances for an Indian summer were dashed rather early in October. After a week of above normal temperatures and abundant sunshine to start the month, a shift in the upper-level wind patterns to northwesterly flow allowed a steady series of cold fronts to sweep across the state. Those cold fronts, combined with an influx of upper-level storms from the Four Corners area, plunged the state into a cold, dreary weather pattern for the remainder of the month.

The final tallies of October's statewide-averaged temperature and precipitation bear out the miserable nature of the early-Autumn weather. Not only did the statewide-averaged temperature mark the month as the 3rd-coolest since 1892, at 56.7 degrees, but also the precipitation total of 5.15 inches finished 1.77 inches above normal, or 17th-wettest on record. At 5.3 degrees below normal, the statewide-averaged temperature for the month was surpassed in its deficit only by the Octobers of 1925 and 1976 with 55.3 and 55.7 degrees, respectively.

While this weather pattern may be looked upon with great consternation by the average Oklahoman, it is a welcome sight to some – notably, Oklahoma's farmers. Still feeling the effects of a year-and-a-half-long drought that plagued the area, many western Oklahoma farmers welcomed the abundant rainfall. Much of western and northern Oklahoma received greater than 250 percent of their normal precipitation totals for the month. The Panhandle, a region hit particularly hard by the drought, received an average of 4.41 inches of precipitation, 294 percent of the established normal. The eastern one-third of the state was the only area to miss the generous rainfall amounts, falling slightly below normal for the month.

As noted previously, the month's beginning was on the warm side, and in some places, downright hot. A multitude of high temperatures in the 80s and 90s could be found across the state during that first week. The highest temperature for the month was 95 degrees, recorded on the 1st and 2nd days of the month at the Webbers Falls (Muskogee County) Mesonet site. The National Weather Service cooperative observer at Webbers Falls noted a 95-degree high temperature on the 2nd as well. Highs took a nosedive shortly thereafter, progressing steadily downwards to the 60s and 50s as the month wore on, eventually settling in the 40s over much of the state by the end of the month. The lowest temperature in the state, 23 degrees, occurred on the 30th at Goodwell (Texas).

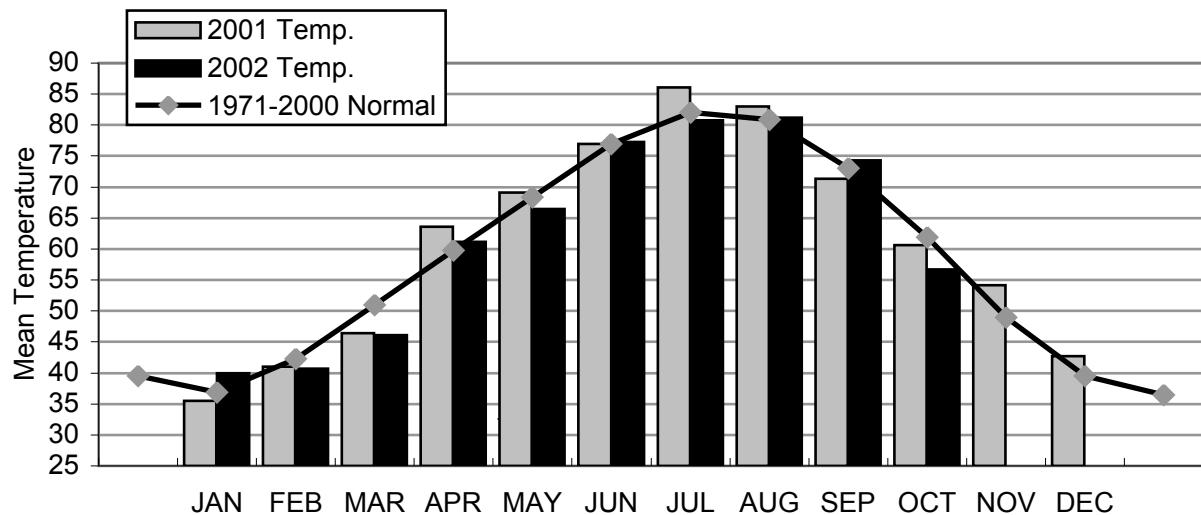
(Continued on page 3.)

The precipitation totals in this wet month were highlighted by an 8.5-inch rainfall at the cooperative observing station in Cherokee (Alfalfa) on the 3rd, in association with storms that formed along a frontal boundary. This same weather system brought rainfall totals greater than 4.5 inches at several locations that day, including Woodward and Cedardale (both in Woodward County), Great Salt Plains (Alfalfa), and Alva (Woods). The excessive rainfall resulted in flash flood warnings for Alfalfa, Woods, and Woodward counties, forcing the closure of state highways 8 and 45 in Alfalfa County due to water over the roadways. Successive weeks brought additional storm systems, with the only true lull in the precipitation occurring during the last half of the 2nd week. Additional rainfall pushed Cherokee's monthly precipitation total to a state-maximum of 13.02 inches, which shattered its previous October precipitation record of 7.88 inches, set in 2000. Nearby Helena (Alfalfa), with 11.08 inches of rainfall, shattered its October precipitation record, established in 1998, of 8.67 inches. Other impressive monthly totals include Reydon (Roger Mills) with 10.68 inches, Cedardale with 10.29 inches, and Great Salt Plains at 10.28 inches. Normal October precipitation totals for these stations fall between 2 and 3 inches.

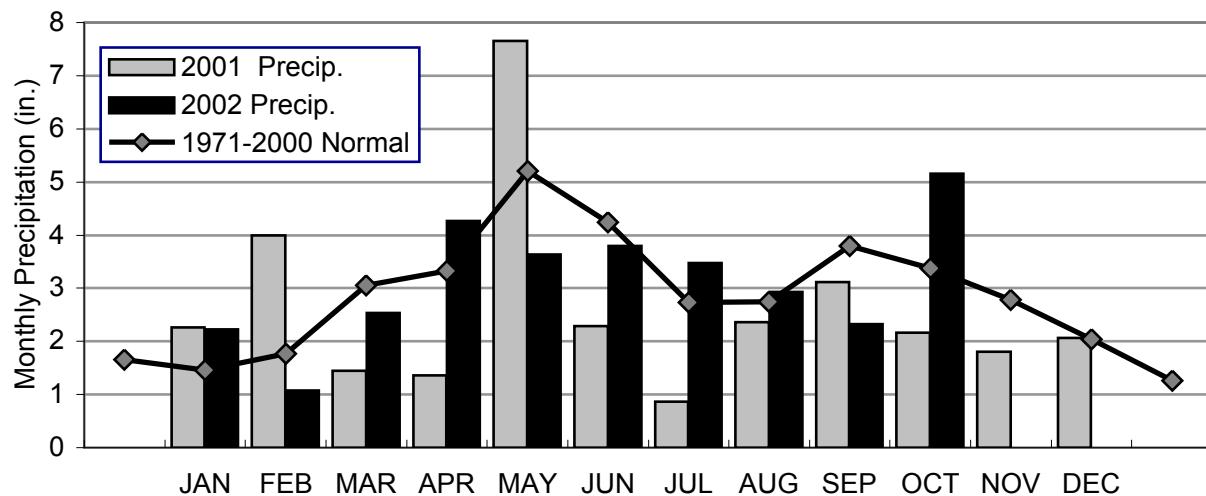
The entirety of the state's severe weather struck during the first 6 days of the month. Various instances of large hail and wind damage were reported on the 3rd and 4th of the month, associated with the thunderstorms that produced the aforementioned flooding in northwestern Oklahoma. Two rail cars were blown off of the tracks 1 mile south of Enid (Garfield), while the nearby Mesonet site at Breckenridge (Garfield) experienced 70 mph wind gusts. Hail between 0.75 and 1 inches was reported in Pond Creek (Grant) and on the northwest side of Ponca City (Kay). Another round of severe weather struck the southern half of the state on the 6th, with more bouts of large hail and wind damage being the primary culprits. The highway patrol headquarters in Lawton (Comanche) reported 1.75-inch hail, and a 60 mph wind gust occurred at the same time 13 miles east of Lawton. One-inch diameter hail was reported 4 miles south of Marlow (Stephens) and 3 miles south of Ratliff City (Carter). Wind damage, mainly in the form of downed tree limbs, was reported 4 miles south of Lindsey (Garvin) and 2 miles northwest of Alma (Stephens).

Gary D. McManus

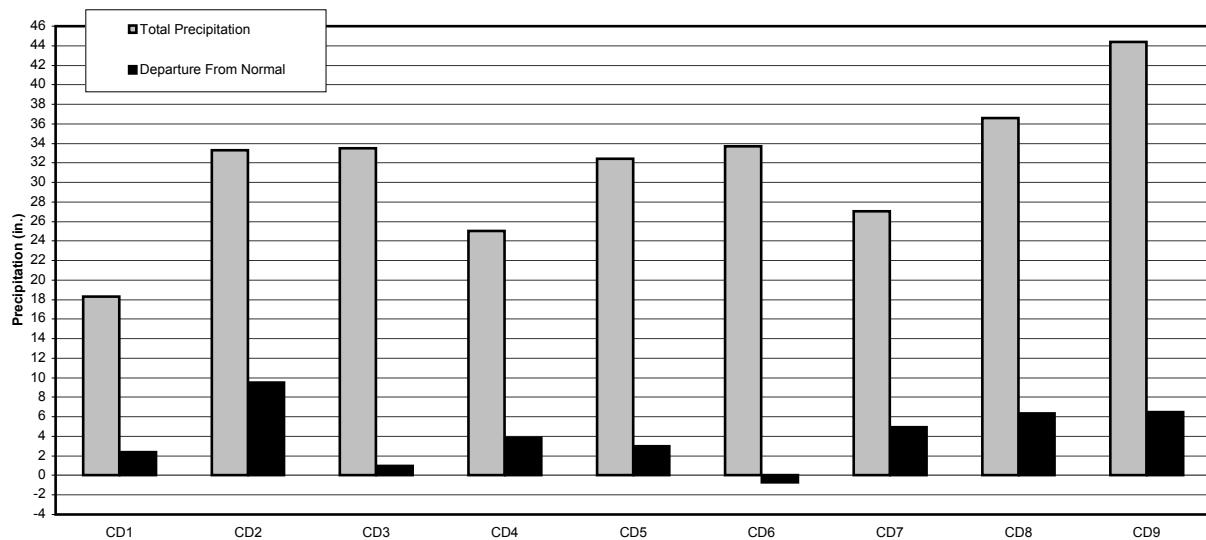
2001 AND 2002 STATEWIDE TEMPERATURES - MONTHLY AVERAGES



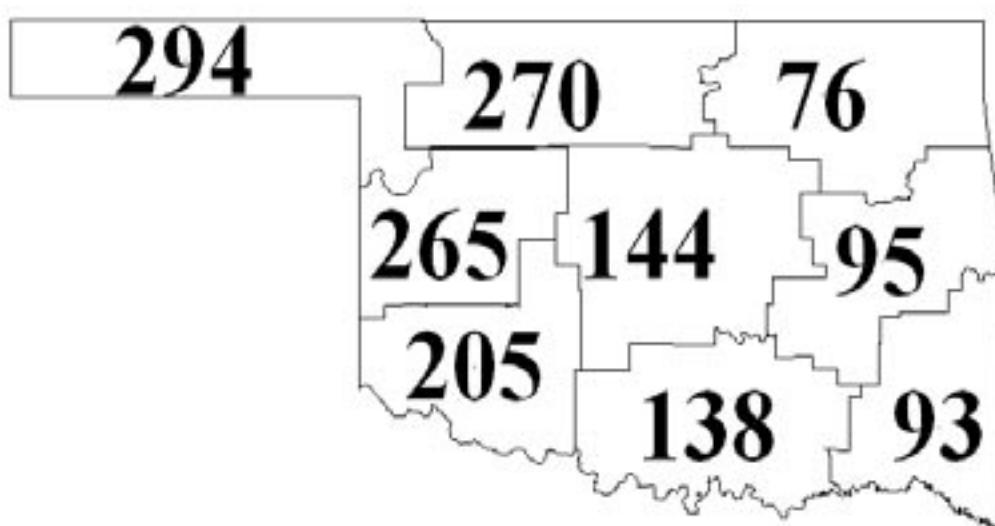
2001 AND 2002 STATEWIDE PRECIPITATION - MONTHLY TOTALS



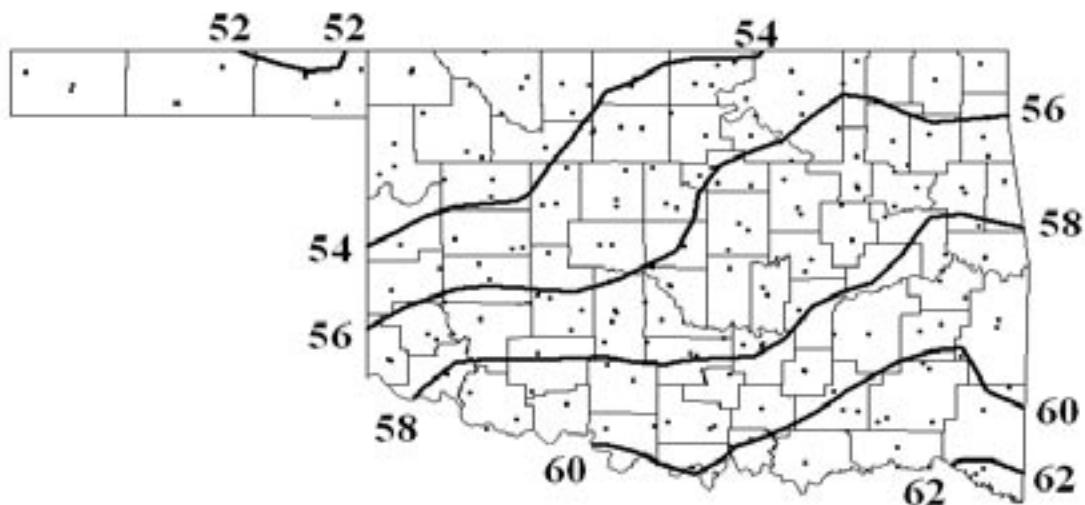
CLIMATE DIVISION AVERAGED PRECIPITATION - JANUARY THROUGH OCTOBER 2002



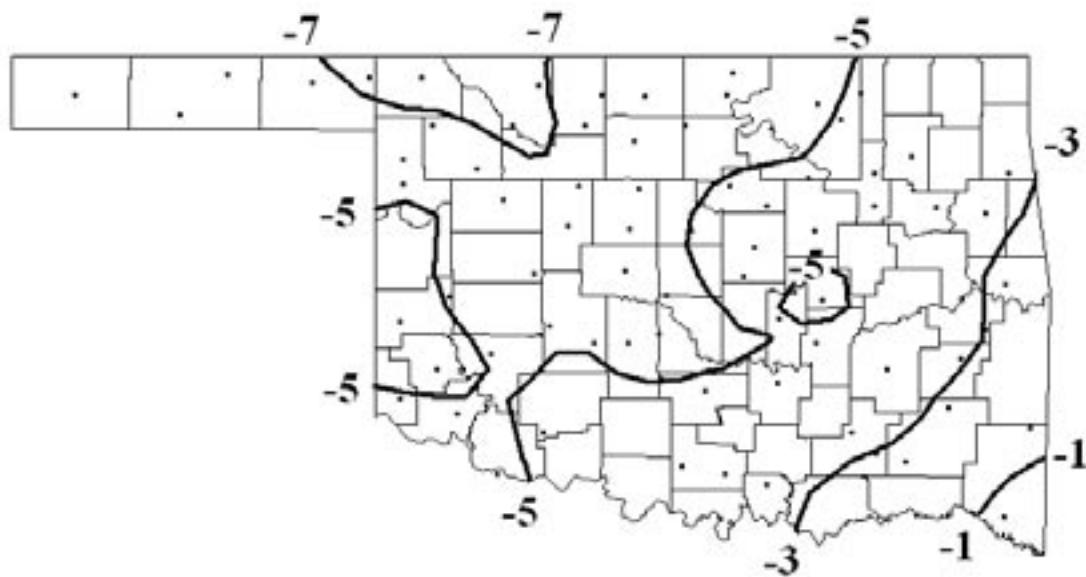
CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION - OCTOBER 2002



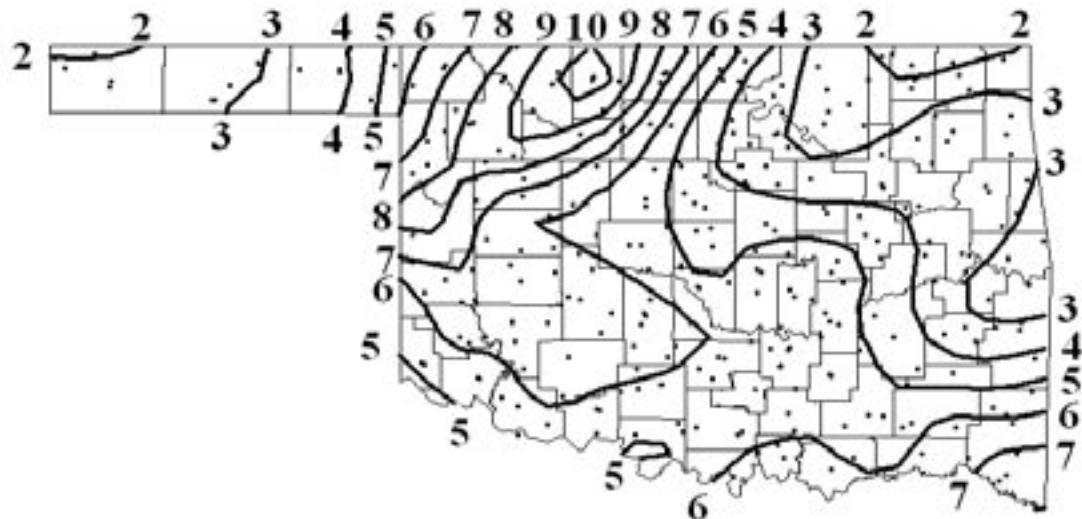
OCTOBER 2002 AVERAGE MONTHLY TEMPERATURE (°F)



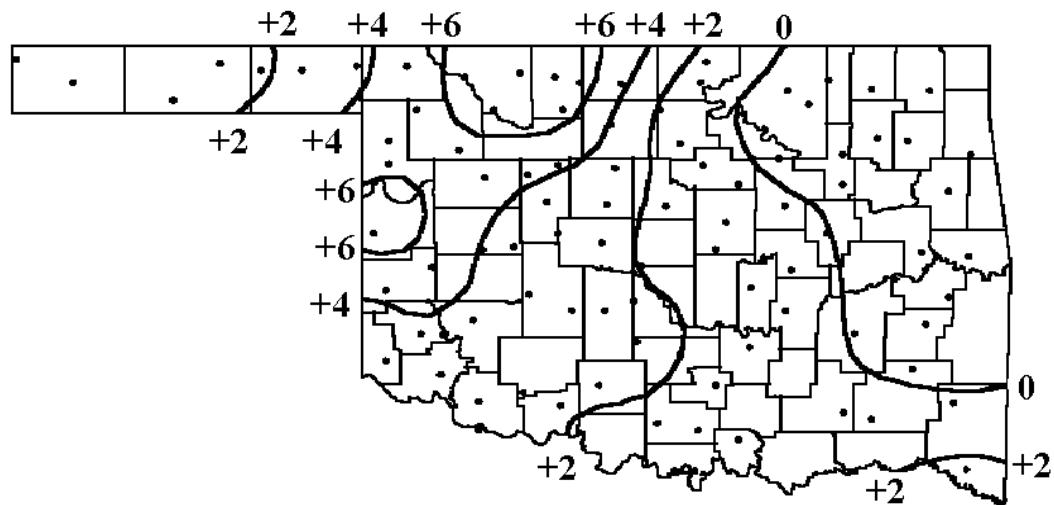
OCTOBER 2002 DEPARTURE FROM NORMAL TEMPERATURE (°F)



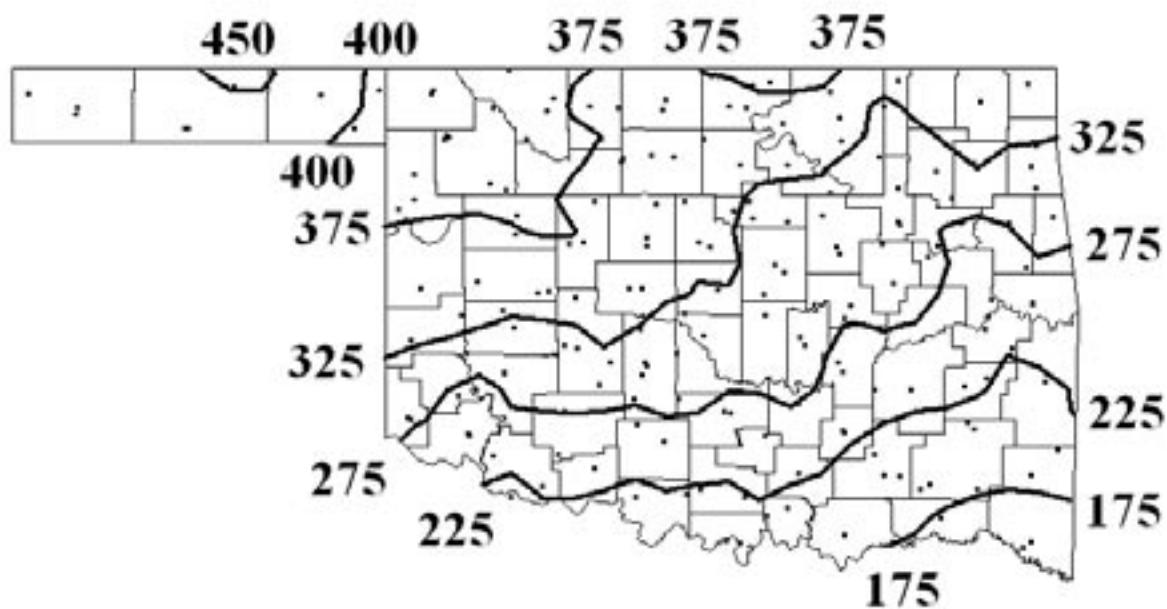
OCTOBER 2002 PRECIPITATION (INCHES)



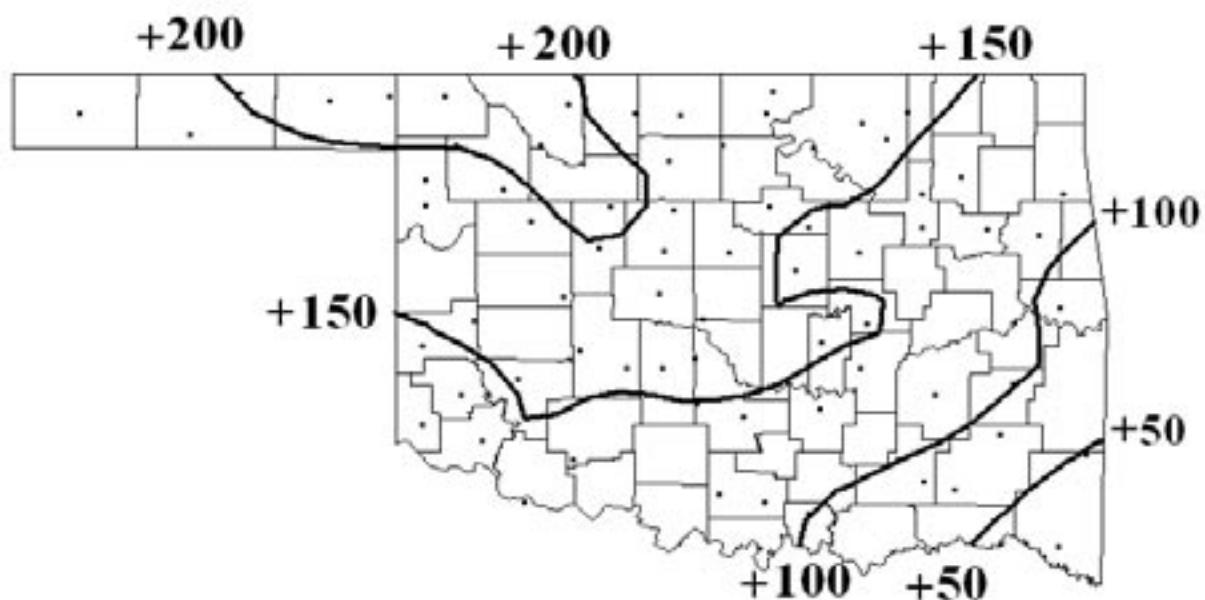
OCTOBER 2002 DEPARTURE FROM NORMAL PRECIPITATION (INCHES)



OCTOBER 2002 ACCUMULATED HEATING DEGREE DAYS (°F)



OCTOBER 2002 DEPARTURE FROM NORMAL HEATING DEGREE DAYS (°F)



OCTOBER 2002 SUMMARY FOR PANHANDLE CLIMATE DIVISION (CD1)

NAME	ID	CD	DEV				HEAT				COOL				DEV			
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	TOT PPT	NUM OBS	FROM NORM	MAX 24-HR	DAY
ARNETT	332	1	53.3	31	-4.7	88	1	30	31	385	151	23	6	7.751	31	5.60	4.10	3
BEAVER	593	1	51.2	31	-6.6	92	1	28	31	453	216	24	11	3.630	31	2.31	0.88	3
BOISE CITY	908	1	51.4	31	-5.5	85	10	24	31	429	171	6	-1	2.237	31	1.04	0.75	22
BUFFALO	1243	1	52.8	30	-8.8	94	1	30	31	396	245	30	-14	6.374	31	4.43	2.20	3
FARGO	3070	1	*****	0	*****	*****	0	*****	0	*****	*****	*****	*****	7.525	31	*****	3.93	3
GAGE	3407	1	52.7	31	-6.1	88	1	30	26	397	185	15	-4	7.046	31	5.36	2.80	2
GATE	3489	1	52.4	31	-7.3	92	1	29	31	414	225	25	-2	5.370	31	3.66	1.44	23
GOODWELL	3628	1	51.5	31	-6.4	90	1	23	30	436	200	17	4	2.140	31	0.94	1.32	22
GUYMON	3835	1	53.1	22	*****	90	2	28	30	276	*****	14	*****	2.450	31	*****	0.86	23
HOOKER	4298	1	52.5	31	-6.5	87	11	28	31	404	198	16	-1	3.280	31	2.10	0.80	3
KENTON	4766	1	52.2	28	*****	87	11	24	30	363	*****	4	*****	1.960	31	0.97	0.63	26
LAVERNE	5045	1	52.7	26	*****	85	1	31	31	332	*****	13	*****	7.632	31	*****	3.60	3
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.730	31	*****	0.59	3
TURPIN	9017	1	52.4	25	*****	93	1	30	31	339	*****	25	*****	2.670	31	1.06	0.83	23

OCTOBER 2002 SUMMARY FOR NORTH CENTRAL CLIMATE DIVISION (CD2)

NAME	ID	CD	DEV				HEAT				COOL				DEV			
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	TOT PPT	NUM OBS	FROM NORM	MAX 24-HR	DAY
ALVA	193	2	53.1	31	-6.7	91	1	34	31	383	193	16	-14	9.600	31	7.71	4.60	3
BILLINGS	755	2	54.6	31	-6.0	89	2	31	18	364	192	41	7	4.492	31	1.53	0.86	24
BLACKWELL 2E	818	2	58.6	25	*****	88	2	38	26	216	*****	56	*****	5.803	31	2.99	1.65	3
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.460	31	*****	3.06	3
CEDARDALE	1620	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	10.294	31	*****	4.61	3
CHEROKEE	1724	2	53.6	25	*****	94	1	34	19	324	*****	38	*****	13.023	31	10.62	8.50	3
ENID	2912	2	54.4	31	-6.1	87	2	34	17	367	194	37	3	6.454	31	3.06	1.02	24
FT SUPPLY	3304	2	52.0	31	-5.8	89	1	28	26	428	191	25	13	6.982	31	5.08	2.93	3
FREEDOM	3358	2	51.6	28	*****	86	1	30	13	390	*****	14	*****	9.470	31	7.40	3.38	2
GREAT SALT P	3740	2	54.1	30	-6.1	90	1	32	26	360	180	32	1	10.280	31	7.52	5.35	3
HELENA	4019	2	53.7	31	-6.3	87	1	33	17	380	194	30	1	11.084	31	8.43	3.96	3
JEFFERSON	4573	2	53.5	30	-7.0	89	2	29	17	379	206	33	1	6.721	31	3.52	2.09	3
LAHOMA	4950	2	55.0	30	*****	90	1	33	17	338	*****	39	*****	5.990	31	*****	1.35	19
LAMONT	5013	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	5.871	31	*****	1.08	3
MEDFORD	5768	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.902	31	*****	3.49	3
MORRISON	6065	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.150	31	*****	0.76	9
MUTUAL	6139	2	53.2	31	-5.4	90	1	31	31	393	178	27	11	7.901	31	5.93	4.00	3
NEWKIRK	6278	2	54.0	31	-5.8	87	3	30	17	386	195	44	16	4.490	31	1.07	1.20	4
ORIENTA	6751	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	8.692	31	*****	2.00	3
PERRY	7012	2	57.2	29	*****	90	4	33	16	281	*****	55	*****	3.682	31	0.63	1.09	24
PONCA CITY	7201	2	54.5	31	-6.8	88	2	30	17	362	202	37	-7	1.498	31	-1.73	0.43	23
RED ROCK	7505	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.060	31	*****	0.87	23
WAYNOKA	9404	2	51.9	31	-8.6	88	1	33	25	421	241	16	-23	8.780	31	6.49	4.67	2
WOODWARD	9760	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	9.916	31	*****	5.56	3

OCTOBER 2002 SUMMARY FOR NORTHEAST CLIMATE DIVISION (CD3)

NAME	ID	CD	MEAN				DEV				HEAT				DEV				COOL				DEV			
			TEMP	NUM	FROM	MAX	TEMP	DAY	MIN	TEMP	DAY	DEG	FROM	MAX	FROM	TOT	NUM	FROM	MAX	FROM	MAX	24-HR	DAY			
BARNSDALL	535	3	56.3	31	-4.7	90	2	28	14	324	160	54	16	2.743	31	-0.79	1.04	4								
BARTLESVILLE	548	3	56.7	31	-4.9	91	2	28	17	314	165	57	15	1.880	31	-1.63	0.52	28								
BIXBY	782	3	56.9	31	-3.9	93	2	31	13	294	120	41	-1	4.031	31	0.19	1.07	28								
BURBANK	1256	3	*****	0	*****	*****	0	*****	0	*****	*****	*****	*****	2.923	31	*****	0.70	4								
CHELSEA	1717	3	*****	0	*****	*****	0	*****	0	*****	*****	*****	*****	3.490	31	*****	0.81	28								
CLAREMORE	1828	3	57.1	31	-3.2	90	4	30	15	301	120	56	21	3.413	31	-0.38	0.98	29								
HOLLOW	4258	3	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.180	31	*****	0.37	29								
HOMINY	4289	3	*****	0	*****	*****	0	***	0	*****	*****	*****	*****	2.500	31	*****	0.73	28								
KANSAS	4672	3	57.7	31	-3.3	88	1	33	14	278	116	51	12	3.230	31	-0.85	0.85	28								
LENAPAH	5118	3	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.290	31	*****	0.33	25								
MANNFORD	5522	3	57.0	31	-5.1	91	2	31	17	303	167	56	11	2.800	31	-0.78	0.82	28								
MARAMEC	5540	3	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.911	31	*****	0.63	25								
NOWATA	6485	3	57.2	29	*****	90	2	30	17	281	*****	55	*****	2.170	31	-1.38	0.50	28								
PAWHUSKA	6935	3	56.0	31	-5.4	90	2	29	14	331	180	54	16	3.455	31	-0.12	1.67	28								
PAWNEE	6940	3	*****	0	*****	***	0	***	0	*****	*****	*****	*****	2.890	31	*****	0.58	28								
PRYOR	7309	3	54.9	28	*****	88	4	30	15	295	*****	12	*****	4.516	31	0.62	1.29	25								
RALSTON	7390	3	54.7	31	-5.7	90	2	27	17	362	188	44	15	3.623	31	0.44	0.70	4								
TULSA	8992	3	58.0	31	-4.6	93	2	33	17	277	125	59	-6	3.325	31	-0.73	1.05	28								
UPPER SPAV	9101	3	57.6	31	*****	91	2	27	14	276	*****	47	*****	3.137	31	****	1.06	29								
VINITA	9203	3	55.6	28	*****	88	2	30	17	303	*****	39	*****	3.731	31	-0.24	0.93	29								
WAGONER	9247	3	58.3	30	-4.5	90	4	33	15	257	135	55	1	1.610	30	****	0.80	31								
WANN	9298	3	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.733	31	*****	0.34	28								

OCTOBER 2002 SUMMARY FOR WEST CENTRAL CLIMATE DIVISION (CD4)

NAME	ID	CD	MEAN				DEV				HEAT				DEV				COOL				DEV			
			TEMP	NUM	FROM	MAX	TEMP	DAY	MIN	TEMP	DAY	DEG	FROM	MAX	FROM	TOT	NUM	FROM	MAX	FROM	MAX	24-HR	DAY			
CANTON DAM	1445	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.661	31	4.22	1.41	23								
CLINTON	1909	4	56.6	26	*****	88	1	33	31	241	*****	23	*****	5.785	31	2.77	1.20	26								
COLONY	2039	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.140	31	****	1.47	8								
CORDELL	2125	4	56.2	31	*****	90	3	35	31	319	*****	46	*****	6.503	31	****	1.42	9								
ELK CITY	2849	4	55.0	31	-5.3	89	1	32	31	344	167	34	2	8.310	31	6.07	2.90	20								
ERICK	2944	4	55.6	31	-4.3	89	1	34	31	324	142	34	12	5.500	31	3.11	1.39	24								
GEARY	3497	4	53.4	28	*****	87	2	35	30	354	*****	29	*****	5.120	31	2.51	1.27	24								
HAMMON	3871	4	54.2	29	*****	88	1	34	25	338	*****	25	*****	6.570	30	****	1.38	20								
LEEDEY	5090	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	7.740	31	****	2.60	3								
MORAVIA	6035	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.692	31	****	2.00	24								
OKEENE	6629	4	55.2	31	-7.3	90	3	34	17	345	219	41	-8	6.501	31	3.68	1.44	19								
RETROP	7565	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.610	31	****	1.15	24								
REYDON	7579	4	53.3	28	*****	87	1	31	41	351	*****	22	*****	10.680	31	8.70	2.80	20								
SAYRE	7952	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.862	31	****	2.44	20								
SWEETWATER	8652	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	5.281	31	****	0.87	24								
TALOGA	8708	4	53.4	31	-5.8	89	1	31	14	392	189	32	11	7.463	31	4.88	2.56	3								
THOMAS	8815	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.070	31	****	1.31	23								
VICI	9172	4	*****	0	*****	***	0	***	0	*****	*****	*****	*****	7.984	31	****	2.75	3								
WEATHERFORD	9422	4	55.8	31	-5.9	87	2	35	31	325	175	39	-7	6.400	31	3.46	1.20	20								
WATONGA	9364	4	54.0	31	-6.4	88	3	31	24	380	207	38	8	5.412	31	2.70	0.93	4								

OCTOBER 2002 SUMMARY FOR CENTRAL CLIMATE DIVISION (CD5)

NAME	ID	CD	DEV				HEAT				DEV				DEV			
			MEAN	NUM	FROM	MAX	MIN	DEG	DEG	COOL	DEV	TOT	NUM	DEV	FROM	MAX	24-HR	DAY
			TEMP	OBs	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBs	NORM	24-HR	DAY
AMBER	200	5	*****	0	*****	*****	0	*****	0	*****	*****	5.310	31	****	1.93	9		
ARCADIA	288	5	*****	0	****	****	0	****	0	*****	*****	5.030	31	****	1.93	9		
BLANCHARD	830	5	57.2	31	-6.3	89	3	38	17	290	184	49	-11	5.971	31	2.30	1.33	9
BRISTOW	1144	5	57.6	30	-4.4	92	3	30	14	277	133	54	4	4.090	31	0.14	1.50	28
CHANDLER	1684	5	56.5	31	-4.8	91	4	33	15	317	163	55	15	5.122	31	1.40	2.50	9
CHICKASHA EXP	1750	5	58.3	31	-5.7	90	3	36	17	261	154	53	-24	8.054	31	4.17	2.51	20
COX CITY	2196	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.760	31	****	1.13	20
CRESCENT	2242	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	4.072	31	****	1.12	25
CUSHING	2318	5	58.0	30	-3.6	92	4	37	18	267	117	56	13	3.961	31	0.56	0.83	28
EDMOND	2788	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	5.160	31	****	1.80	8
EL RENO	2818	5	55.0	31	-6.0	89	1	36	18	350	187	41	2	6.590	31	3.56	3.14	25
GUTHRIE	3821	5	55.9	31	-4.9	89	3	33	18	332	163	49	12	4.452	31	1.15	1.14	9
HENNESSEY	4055	5	54.2	31	-6.0	92	3	34	21	378	199	42	12	6.780	31	4.08	1.80	19
INGALLS	4489	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	3.591	31	****	1.11	25
KINGFISHER	4861	5	55.5	31	-5.2	90	2	35	26	342	174	49	14	5.270	31	2.70	1.06	4
KONAWA	4915	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	6.300	31	****	3.77	8
MARSHALL	5589	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	4.090	31	****	1.12	24
MEEKER	5779	5	56.0	31	-3.8	88	4	32	14	323	134	45	16	5.360	31	1.10	1.43	25
MULHALL	6110	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	3.220	31	****	0.88	25
NORMAN NWS	6386	5	56.0	31	*****	87	3	36	17	318	*****	38	*****	4.476	31	****	1.14	24
OKEMAH	6638	5	58.1	31	-6.1	92	3	37	14	273	177	60	-11	6.330	31	2.31	1.40	25
OKLAHOMA CTY F.	6659	5	*****	0	*****	****	0	***	0	*****	*****	*****	*****	5.073	31	****	1.28	8
OKLAHOMA CTY	6661	5	56.2	31	-5.8	88	2	38	17	314	162	41	-18	4.642	31	1.00	1.26	8
PERKINS	7003	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	3.710	31	****	0.88	25
PIEDMONT	7068	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	4.270	31	****	1.24	9
PRAGUE	7264	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	5.670	31	****	1.91	9
SEMINOLE	8042	5	57.7	31	-5.3	91	4	35	14	280	159	54	-3	5.426	31	1.37	1.80	8
SHAWNEE	8110	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	5.910	31	****	1.47	25
STELLA	8479	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	4.751	31	****	1.35	9
STILLWATER	8501	5	56.7	31	-4.6	90	3	31	17	309	155	51	13	3.534	31	0.32	0.80	25
TECUMSEH	8751	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	5.440	31	****	2.46	29
UNION CITY	9086	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	5.155	31	****	2.22	9
WANETTE	9291	5	57.6	29	****	90	4	33	16	269	*****	56	*****	6.800	29	****	2.40	9
WEWOKA	9575	5	*****	0	****	****	0	***	0	*****	*****	*****	*****	5.882	31	****	2.77	9

OCTOBER 2002 SUMMARY FOR EAST CENTRAL CLIMATE DIVISION (CD6)

NAME	ID	CD	DEV						HEAT		DEV		COOL		DEV		DEV		
			MEAN	NUM	FROM	MAX	MIN		DEG	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY
			TEMP	OBs	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBs	NORM	24-HR	DAY	
ASHLAND	364	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.130	31	*****	1.11	7	
BEGGS	631	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.450	31	*****	1.28	25	
CALVIN	1391	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.300	31	*****	1.40	11	
CHECOTAH	1711	6	59.3	28	*****	92	3	36	17	228	*****	68	*****	4.450	31	*****	1.20	29	
CLAYTON	1858	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.160	31	*****	0.82	9	
DEWAR	2485	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.252	31	*****	1.35	20	
DUSTIN	2690	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.230	31	*****	1.45	9	
HASKELL	3956	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.200	31	*****	1.24	25	
HOLDENVILLE	4235	6	57.9	31	-4.0	94	3	36	17	264	122	43	-3	4.531	31	0.64	1.94	8	
LAKE EUFAULA	4975	6	59.7	28	*****	90	3	40	15	215	*****	66	*****	2.642	31	-1.79	0.71	26	
LYONS	5437	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.312	31	*****	1.41	29	
MCALESTER	5664	6	59.0	31	-4.5	92	3	34	15	239	127	53	-13	4.722	31	0.13	1.16	9	
MCCURTAIN	5693	6	60.5	31	-3.4	93	2	35	16	223	122	82	14	2.405	31	-1.48	0.75	29	
OKMULGEE	6670	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.950	31	-0.32	1.40	24	
OKTAHA	6678	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.482	31	*****	0.93	29	
SALLISAW	7862	6	60.3	31	-1.9	92	3	38	18	211	68	65	9	3.390	31	-0.78	1.05	29	
SCIPIO	7979	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.560	31	*****	1.26	9	
SHORT	8170	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.010	31	*****	0.84	29	
TAHLEQUAH	8677	6	57.8	31	-3.9	89	1	32	15	275	119	51	-2	3.541	31	-0.79	0.91	29	
WEBBERS FALL	9445	6	59.0	29	*****	95	2	31	17	233	*****	60	*****	3.360	31	-1.17	1.03	29	
WETUMKA	9571	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.277	31	*****	2.12	9	

OCTOBER 2002 SUMMARY FOR SOUTHWEST CLIMATE DIVISION (CD7)

NAME	ID	CD	MEAN				DEV		MIN				HEAT		DEV		COOL		DEV		TOT		DEV	
			TEMP	NUM	FROM	MAX	TEMP	DAY	TEMP	DAY	DEG	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY			
ALTUS	179	7	57.1	31	-5.7	94	1	36	31	291	168	45	-10	5.830	31	3.14	1.96	9						
ALTUS DAM	184	7	59.1	31	-3.5	91	4	36	31	244	110	63	6	5.760	31	2.92	2.30	9						
ANADARKO	224	7	56.0	31	-4.7	87	4	35	17	322	156	43	11	6.261	31	2.99	2.47	9						
CARNEGIE	1504	7	56.4	31	-4.8	88	2	36	31	310	148	44	2	7.007	31	4.22	2.62	9						
CHATTANOOGA	1706	7	59.1	31	-4.3	91	4	39	31	247	136	65	4	7.100	31	3.98	2.68	9						
DUNCAN 11 W	2668	7	*****	0	*****	*****	0	*****	0	*****	*****	*****	*****	5.230	31	*****	1.98	9						
FREDERICK	3353	7	57.4	27	*****	92	3	37	30	249	*****	44	*****	6.170	31	2.91	2.04	28						
HEADRICK	3998	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	6.070	31	*****	2.30	7						
HOBART	4204	7	56.3	31	-6.3	90	1	36	31	306	180	37	-14	5.843	31	3.02	1.76	8						
HOLLIS	4249	7	57.1	31	-5.3	92	1	36	31	278	147	35	-17	4.680	31	2.27	1.20	25						
LOOKEBA	5329	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	5.960	31	*****	2.10	9						
MANGUM	5509	7	57.5	31	-4.1	89	2	36	31	274	125	42	-2	7.882	31	5.21	2.90	7						
RANDLETT	7403	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	4.872	31	*****	1.74	9						
ROOSEVELT	7727	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	6.160	31	*****	2.22	9						
SEDAN	8016	7	*****	0	*****	****	0	***	0	*****	*****	*****	*****	6.949	31	*****	2.99	10						
SNYDER	8299	7	*****	0	*****	*****	0	***	0	*****	*****	*****	*****	6.060	31	*****	2.20	9						
RANDLETT	7403	7	*****	0	*****	*****	0	***	0	*****	*****	*****	*****	5.670	31	*****	1.03	24						
WALTERS	9278	7	60.3	22	*****	92	4	40	31	163	*****	59	*****	5.030	31	1.52	2.06	10						

OCTOBER 2002 SUMMARY FOR SOUTH CENTRAL CLIMATE DIVISION (CD8)

NAME	ID	CD	MEAN				DEV		MIN				HEAT		DEV		COOL		DEV		TOT		DEV	
			TEMP	NUM	FROM	MAX	TEMP	DAY	TEMP	DAY	DEG	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY			
ADA	17	8	57.5	31	-5.4	88	3	35	16	277	154	46	-13	4.240	31	0.34	1.31	9						
ALLEN	147	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.690	31	*****	1.45	8						
ARDMORE	292	8	60.1	31	-4.7	90	3	41	29	211	120	60	-24	4.810	31	0.39	1.38	8						
ATOKA DAM	394	8	60.1	30	-3.8	93	4	33	17	204	102	57	-11	3.520	30	*****	1.12	19						
BOKCHITO	917	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	5.010	31	*****	4.00	20						
CANEY	1437	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.460	31	*****	1.47	19						
CENTRAHOMA	1648	8	59.5	31	*****	91	4	36	17	232	*****	61	*****	6.650	31	*****	2.30	7						
CHICKASAW	1745	8	56.6	27	*****	88	4	34	15	251	*****	23	*****	4.770	31	0.86	0.94	8						
DAISY	2354	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	4.341	31	*****	1.10	25						
DUNCAN	2660	8	59.4	28	*****	89	4	40	31	214	*****	56	*****	5.840	31	1.97	2.08	9						
ELMORE CITY	2872	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	5.540	31	*****	2.08	9						
GRADY	3688	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	4.980	31	*****	1.13	9						
HEALTON	4001	8	59.8	31	-3.2	91	4	39	17	221	97	61	3	4.980	31	1.02	1.93	9						
HENNEPIN	4052	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	4.530	31	*****	2.10	9						
KETCHUM RAN	4780	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	6.600	31	*****	1.55	8						
KINGSTON	4865	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	6.900	31	*****	3.61	19						
LINDSAY	5216	8	56.9	31	-5.4	90	3	36	17	292	153	41	-11	9.780	31	6.08	3.55	8						
LOCO	5247	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	4.380	31	*****	1.75	9						
MADILL	5468	8	60.5	30	-3.1	90	3	39	31	200	90	66	3	5.891	31	1.10	1.75	9						
MARIETTA 5 SW	5563	8	59.4	31	-4.5	89	4	35	17	226	126	53	-13	7.020	31	2.63	2.51	19						
MARLOW	5581	8	59.4	31	*****	91	3	37	14	243	*****	69	*****	6.180	31	*****	2.34	9						
MCGEE CREEK	5713	8	61.2	31	-2.0	93	3	39	16	186	72	69	10	4.900	31	0.09	1.44	19						
PAULS VALLEY	6926	8	57.9	31	-4.4	91	4	35	17	269	139	50	3	5.542	31	1.65	2.38	9						
PONTOTOC	7214	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	5.380	31	*****	1.00	8						
TISHOMINGO	8884	8	*****	0	*****	****	0	***	0	*****	*****	*****	*****	6.140	31	*****	1.50	24						
WAURIKA	9395	8	60.6	30	-5.7	92	3	41	17	198	132	67	-40	6.070	31	2.90	1.35	9						

OCTOBER 2002 SUMMARY FOR SOUTHEAST CLIMATE DIVISION (CD9)

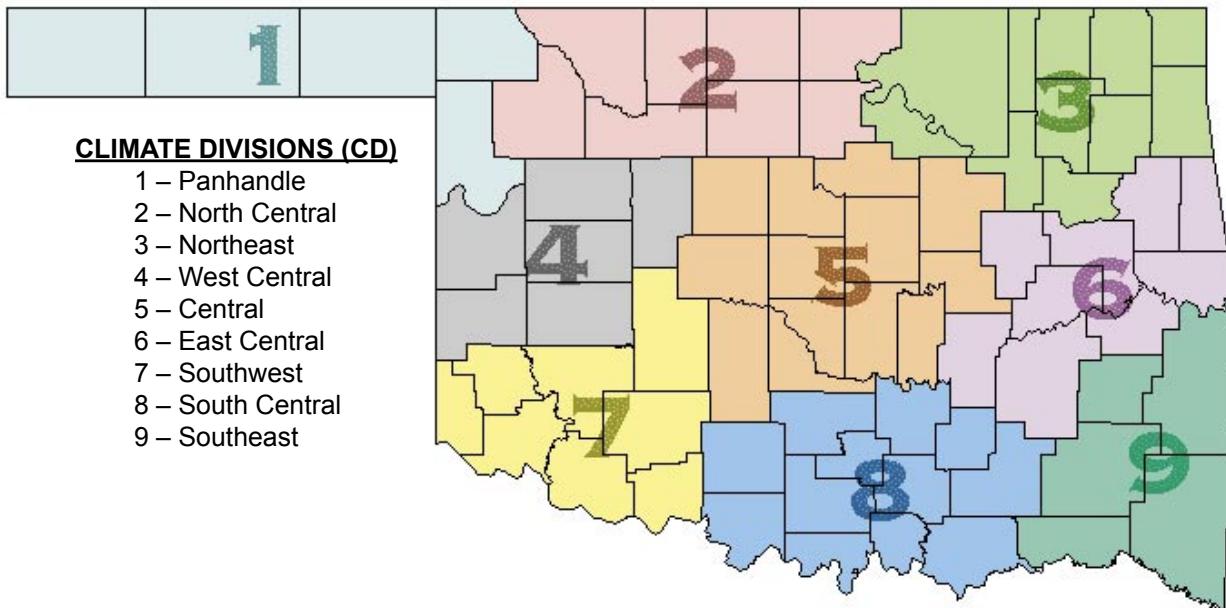
NAME	ID	CD	MEAN				DEV				HEAT				DEV				COOL				DEV			
			TEMP	NUM	OBS	NORM	FROM	MAX	DAY	MIN	TEMP	DAY	DEG	FROM	DEG	FROM	TOT	NUM	OBS	NORM	FROM	MAX	24-HR	DAY		
ANTLERS	256	9	60.1	31	-3.4	89	4	33	15	204	90	53	-13	6.120	31	0.95	2.06	19								
BATTIEST	567	9	58.1	27	*****	89	4	30	15	216	*****	31	*****	5.512	31	0.00	1.75	18								
BENGAL	670	9	*****	0	*****	*****	0	***	0	*****	*****	*****	*****	3.201	31	*****	0.56	25								
BROKEN BOW	1162	9	*****	0	*****	*****	0	***	0	*****	*****	*****	*****	7.900	31	*****	3.35	19								
CARTER TWR	1544	9	*****	0	*****	****	0	***	0	*****	*****	*****	*****	5.210	31	*****	2.15	9								
FANSHAWE	3065	9	*****	0	*****	****	0	***	0	*****	*****	*****	*****	2.520	31	*****	0.80	9								
IDABEL	4451	9	63.4	31	-0.2	92	4	39	15	115	1	66	-4	7.971	31	3.07	3.67	20								
PAGE	6842	9	57.8	28	*****	88	7	30	17	246	*****	44	*****	4.290	31	*****	1.09	9								
SMITHVILLE	8285	9	58.4	30	-1.5	87	5	30	15	230	47	32	7	5.892	31	-0.33	1.90	9								
SPIRO	8416	9	*****	0	*****	****	0	***	0	*****	*****	*****	*****	2.120	31	*****	0.66	11								
TUSKAHOMA	9023	9	61.1	31	-2.4	92	2	31	15	196	88	75	13	4.340	31	-0.48	0.96	9								
VALLIANT	9118	9	*****	0	*****	****	0	***	0	*****	*****	*****	*****	6.151	31	*****	2.55	19								
WILBURTON	9634	9	59.6	31	-3.1	92	6	31	15	222	97	54	1	3.272	31	-1.15	0.70	9								
WISTER	9724	9	60.6	31	*****	92	2	31	16	213	*****	77	*****	2.980	31	*****	0.54	19								

OCTOBER 2002 CLIMATE DIVISION SUMMARY

NAME	CD	MEAN				DEV				HEAT				DEV				COOL				DEV			
		TEMP	NUM	OBS	NORM	FROM	MAX	DAY	MIN	TEMP	DAY	DEG	FROM	DEG	FROM	TOT	NUM	OBS	NORM	FROM	MAX	24-HR	DAY		
PANHANDLE	1	52.2	8	-6.1	94	1	23	30	414	189	19	2	4.410	14	2.91	4.10	3								
NORTH CENTRAL	2	53.7	12	-6.3	94	1	28	26	380	194	31	1	7.190	24	4.53	8.50	3								
NORTHEAST	3	56.9	11	-4.4	93	2	27	14	301	143	52	10	2.860	21	-0.90	1.67	28								
WEST CENTRAL	4	55.0	7	-5.5	90	3	31	24	347	174	37	6	6.720	19	4.18	2.90	20								
CENTRAL	5	56.6	15	-5.2	92	3	30	14	308	162	49	2	5.070	33	1.55	3.77	8								
EAST CENTRAL	6	59.1	5	-3.2	95	2	31	17	242	102	59	4	4.060	21	-0.20	2.12	9								
SOUTHWEST	7	57.3	8	-5.0	94	1	35	17	284	149	46	-6	6.030	18	3.09	2.99	10								
SOUTH CENTRAL	8	59.4	12	-4.1	93	3	33	17	230	118	58	-7	5.620	25	1.56	4.00	20								
SOUTHEAST	9	60.5	6	-1.8	92	2	30	15	196	60	59	7	4.820	14	-0.35	3.67	20								

Note: The above climate division summary contains similar information to the preceding tables but are the averages or extremes over all of the stations reporting in each climate division.

CLIMATE DIVISION MAP



EXPLANATION OF TABLES

The tables appearing on the preceding pages contain the following information for each station or climate division:

Station Name: The name of the observing site.

Station Identification Number: These numbers usually are assigned by the National Climatic Data Center.

Climate Division: See the figure above.

Number of Temperature Observations: These numbers are the actual number of temperature reports recorded at the station during the current month. Missing observations may result in artificially high or low mean monthly temperatures.

Deviation from Normal: The deviation of the observed mean monthly temperature from the monthly station normal. A positive value indicates the month was warmer than normal. A negative value indicates the month was cooler than normal. Normal monthly temperatures may be calculated by subtracting the deviation from the observed temperature.

Maximum Daily Temperature: The maximum daily maximum temperature observed during the current month and year and the day on which it occurred.

Minimum Daily Temperature: The minimum daily minimum temperature observed during the current month and year and the day on which it occurred.

Heating Degree Days: HDD are calculated each day of the month for which there is a temperature report and the average temperature for the day is less than 65 degrees. Daily values are summed to arrive at a monthly total. HDD are a qualitative measure of how much heat was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. See the equation to the right for the HDD calculation.

Deviation from Normal Heating Degree Days: The difference between the actual HDD and the normal HDD for the month. A positive value indicates higher than normal heating requirements for the month as a whole. A negative value indicates lower than normal heating requirements for the month as a whole. Normal HDD may be calculated by subtracting the deviation from observed HDD.

Cooling Degree Days: CDD are calculated each day of the month for which there is a temperature report and the average temperature for the day exceeds 65 degrees. Daily values are summed to give a monthly total. CDD are a proxy measure of how much cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. See the equation to the right for the CDD calculation.

Deviation from Normal Cooling Degree Days: The difference between the actual HDD and the normal HDD for the month. A positive value indicates higher than normal cooling requirements for the month as a whole. A negative value indicates lower than normal cooling requirements for the month as a whole. Normal cooling degree days may be found by subtracting the deviation from the observed cooling degree days.

Total Precipitation: Often incorrectly referred to as a mean precipitation, this value is the sum of all precipitation reported during the month at a station. If snow occurred, it is to be melted and its water equivalent recorded.

Number of Precipitation Observations: The number of days a rain or no rain observation was reported. Missing observations frequently result in artificially low total precipitation values.

Deviation from Normal Precipitation: The difference between the actual rainfall and the normal rainfall for the month. A positive value indicates more rain than normal was received. A negative value indicates less than was expected rainfall was received. Normal rainfall may be calculated by subtracting the deviation from the monthly total.

Maximum 24-Hour Report and Day: The maximum amount of precipitation recorded during the station's 24-hour observation period for the current month and year and the day on which it was recorded.

Heating Degree Days Calculation

NumDays

$$\sum_{i=1}^{NumDays} 65 - ((TMAX_i + TMIN_i) / 2)$$

Where NumDays = the number of days in the month of interest (e.g., NumDays = 31 for January)

Cooling Degree Days Calculation

NumDays

$$\sum_{i=1}^{NumDays} ((TMAX_i + TMIN_i) / 2) - 65$$

Where NumDays = the number of days in the month of interest (e.g., NumDays = 30 for June)

MESONET MONTHLY SUMMARY FOR OCTOBER 2002

NAME	MEAN MAX						MIN						TOT MAX						MEAN MAX						TOT MAX					
	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY
PANHANDLE																														
Arnett	53.3	86	1	31	31	375	11	7.64	3.02	2	Goodwell	50.9	87	11	27	30	451	12	3.41	1.09	22									
Beaver	52.6	85	1	30	31	****	****	3.48	.88	2	Hooker	51.5	88	1	28	30	434	16	3.24	.74	3									
Boise City	49.7	84	11	25	30	478	4	2.54	.91	22	Kenton	50.6	85	11	25	30	453	5	2.18	.77	22									
Buffalo	52.0	86	1	30	26	416	13	7.07	1.94	3	Slapout	51.8	85	1	29	31	422	12	3.74	1.12	2									
NORTH CENTRAL																														
Blackwell	54.6	88	2	31	17	357	33	4.99	.87	19	Medford	54.0	88	1	31	17	365	26	6.52	2.24	2									
Breckenridge	54.2	88	2	31	17	366	30	5.76	1.94	19	Newkirk	54.0	88	2	33	17	375	35	3.90	.59	28									
Cherokee	54.2	88	1	34	17	355	20	12.77	4.79	2	Red Rock	54.9	90	2	31	17	352	38	3.98	1.07	23									
Fairview	53.7	88	1	36	17	****	****	****	****	***	Seiling	53.5	87	1	33	31	371	16	10.70	3.42	3									
Freedom	52.6	87	1	32	26	400	14	8.18	2.89	2	Woodward	*****	***	***	***	***	***	9.45	4.88	2										
Lahoma	53.8	87	1	34	17	370	23	5.65	1.38	19	Alva	52.9	89	1	33	17	393	18	10.16	3.74	2									
May Ranch	51.8	86	1	32	31	424	14	7.58	2.75	3																				
NORTHEAST																														
Bixby	57.0	90	1	30	17	293	46	3.85	1.13	28	Pryor	55.6	90	1	26	14	333	41	4.57	1.21	28									
Burbank	54.5	90	2	29	17	365	39	3.49	.62	27	Skiatook	56.3	90	2	31	17	313	45	2.23	.80	27									
Copan	54.9	90	2	30	17	355	40	1.98	.40	24	Vinita	54.7	89	2	27	14	358	40	1.85	.42	28									
Foraker	54.0	91	2	29	14	379	37	2.36	.55	27	Wynona	55.3	90	2	28	17	344	42	2.48	.58	27									
Jay	55.7	90	2	29	17	328	41	3.82	1.21	28	Porter	57.4	91	2	32	14	281	44	3.70	.98	28									
Miami	54.8	89	2	27	17	358	43	2.00	.50	28	Inola	57.0	92	2	30	14	293	46	3.71	1.29	24									
Nowata	*****	***	***	***	***	***	1.58	.45	27	Claremore	57.1	91	2	32	17	292	48	3.12	.83	28										
Pawnee	55.3	89	2	30	14	342	40	2.54	.52	24																				
WEST CENTRAL																														
Bessie	55.6	88	1	34	31	324	33	7.28	2.21	19	Putnam	53.7	86	1	33	31	372	20	5.29	2.27	23									
Butler	54.9	88	3	33	17	340	29	5.08	1.42	19	Retrop	56.2	89	3	35	31	308	34	6.67	1.67	24									
Camargo	53.5	88	1	33	31	371	16	8.34	2.93	3	Watonga	53.6	87	2	34	31	379	25	6.16	1.65	19									
Cheyenne	53.9	85	1	31	31	357	14	****	****	***	Weatherford	54.6	87	1	34	31	351	28	****	****	***									
Erick	54.7	88	1	33	31	343	25	5.51	1.66	24																				
CENTRAL																														
Bowlegs	57.0	90	3	33	14	292	44	6.50	1.40	9	Oilton	55.5	91	3	27	14	339	44	2.95	.75	27									
Bristow	56.0	92	3	29	14	324	46	3.96	.97	24	Okemah	57.3	92	3	34	14	288	50	6.25	1.43	24									
Chandler	56.5	89	3	33	14	306	43	4.49	1.22	8	Perkins	56.2	91	2	34	17	316	44	3.30	.74	24									
Chickasha	57.2	91	2	37	17	290	47	8.05	2.64	19	Shawnee	57.0	90	3	36	17	291	42	5.57	1.57	24									
El Reno	54.1	88	2	32	17	368	31	6.79	2.49	8	Spencer	55.8	88	2	33	14	327	42	4.13	1.05	24									
Guthrie	56.0	88	2	34	17	319	39	4.97	1.28	24	Stillwater	55.5	89	2	30	14	337	41	3.30	.76	24									
Kingfisher	55.4	89	2	34	17	334	35	5.31	1.23	3	Washington	56.4	89	3	38	17	344	42	5.38	1.74	8									
Marena	55.4	89	2	33	17	334	37	3.85	.90	24	Ninnekah	56.9	89	2	37	15	297	46	6.72	2.21	8									
Marshall	55.2	90	2	31	17	345	41	4.37	.99	23	Acme	56.9	90	2	34	15	300	48	6.97	2.44	8									
Minco	55.8	88	2	36	17	323	37	6.08	2.48	8	Norman	56.1	89	2	37	17	344	42	4.42	1.11	28									
EAST CENTRAL																														
Calvin	57.9	91	3	34	15	268	48	6.05	1.95	9	Stigler	58.5	92	1	31	16	257	55	2.71	.67	28									
Cookson	57.4	90	1	31	16	278	43	3.16	1.30	28	Stuart	58.7	92	3	37	17	252	57	5.16	1.18	9									
Eufaula	*****	***	***	***	***	***	***	***	***	***	Tahlequah	57.5	89	1	31	17	278	45	2.88	.98	28									
Haskell	57.0	91	1	31	14	290	41	4.18	.98	28	Webbers Falls	59.4	95	1	32	16	234	59	3.43	1.22	28									
McAlester	59.3	93	3	33	15	239	64	5.36	1.35	9	Westville	56.9	89	1	32	17	289	37	3.17	1.42	28									
Okmulgee	56.8	93	1	29	14	301	46	4.05	.87	28	Hectorville	57.9	93	2	34	17	277	55	4.24	1.06	24									
Sallisaw	59.3	92	1	33	16	231	55	2.86	1.04	28																				
SOUTHWEST																														
Altus	58.1	91	1	37	31	262	47	4.89	2.53	8	Medicine Park	57.7	90	3	37	31	277	50	6.63	2.59	8									
Fort Cobb	56.3	87	2	38	31	310	41	5.95	1.88	8	Tipton	58.9	92	3	38	31	243	55	5.02	2.30	8									
Hinton	54.8	88	1	36	31	345	30	6.14	1.27	24	Walters	59.2	93	2	40	15	240	59	5.47	2.00	8									
Hobart	56.0	89	1	35	31	313	35	7.39	1.98	8	Apache																			

EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION OCTOBER 2002

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	94	1	BUFFALO	23	30	GOODWELL	4.10	3	ARNETT	7.75	ARNETT
2	94	1	CHEROKEE	28	14	FT SUPPLY	8.50	3	CHEROKEE	13.02	CHEROKEE
				28	26	FT SUPPLY					
3	93	1	BIXBY	27	14	RALSTON	1.67	28	PAWHUSKA	4.52	PRYOR
	93	2	BIXBY	27	17	RALSTON					
	93	1	TULSA	27	14	UPPER SPAV					
	93	2	TULSA								
4	90	3	CORDELL	31	31	REYDON	2.90	20	ELK CITY	10.68	REYDON
	90	2	OKEENE	31	14	TALOGA					
	90	3	OKEENE	31	24	WATONGA					
5	92	3	BRISTOW	30	14	BRISTOW	3.77	8	KONAWA	8.05	CHICKASHA
	92	4	CUSHING								
	92	3	HENNESSEY								
	92	3	OKEMAH								
6	95	2	WEBBERS FALL	31	15	WEBBERS FALL	2.12	9	WETUMKA	5.30	CALVIN
				31	16	WEBBERS FALL					
				31	17	WEBBERS FALL					
7	94	1	ALTUS	35	15	ANADARKO	2.99	10	SEDAN	7.88	MANGUM
				35	17	ANADARKO					
8	93	4	ATOKA DAM	33	16	ATOKA DAM	4.00	20	BOKCHITO	9.78	LINDSAY
	93	3	MCGEE CREEK	33	17	ATOKA DAM					
9	92	4	IDABEL	30	15	BATTIEST	3.67	20	IDABEL	7.97	IDABEL
	92	2	TUSKAHOMA	30	15	PAGE					
	92	1	WILBURTON	30	16	PAGE					
	92	6	WILBURTON	30	17	PAGE					
	92	2	WISTER	30	15	SMITHVILLE					

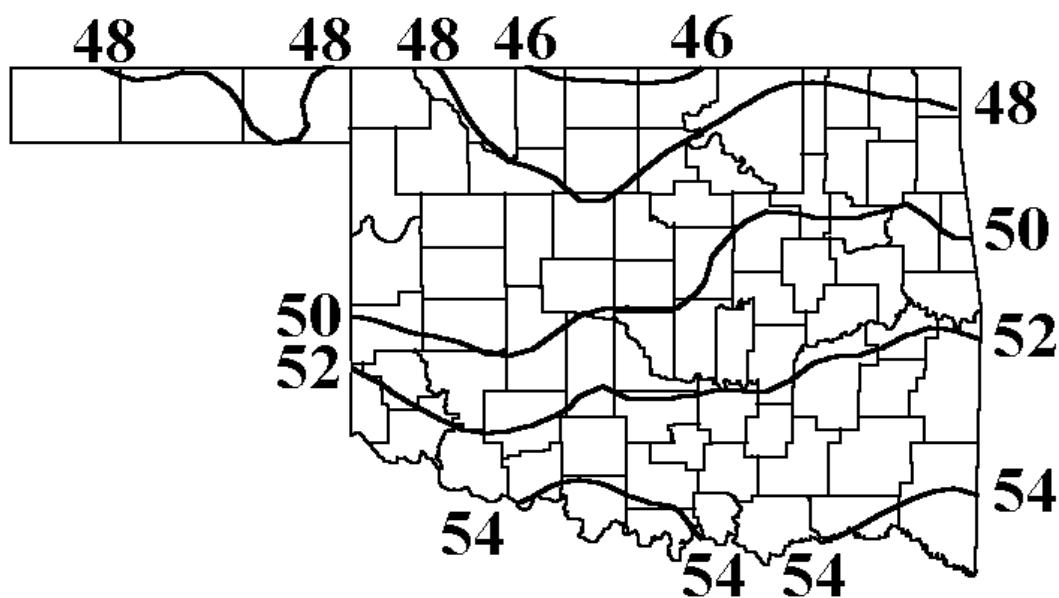
TABLE OF 2001/2002 COMPARISONS

Station	OCTOBER Temperature (F)		OCTOBER Precipitation (in.)	
	2001	2002	2001	2002
Arnett	58.0	53.3	0.00	7.75
Enid	60.7	54.4	0.13	6.45
Tulsa	61.9	58.0	2.81	3.33
Elk City	60.6	55.0	0.08	8.31
Oklahoma City	60.2	56.2	3.56	4.64
McAlester	61.1	59.00	2.98	4.72
Altus Irr Station	62.4	57.1	0.03	5.83
Ardmore	63.8	60.1	3.89	4.81
Idabel	62.4	63.4	6.85	7.97

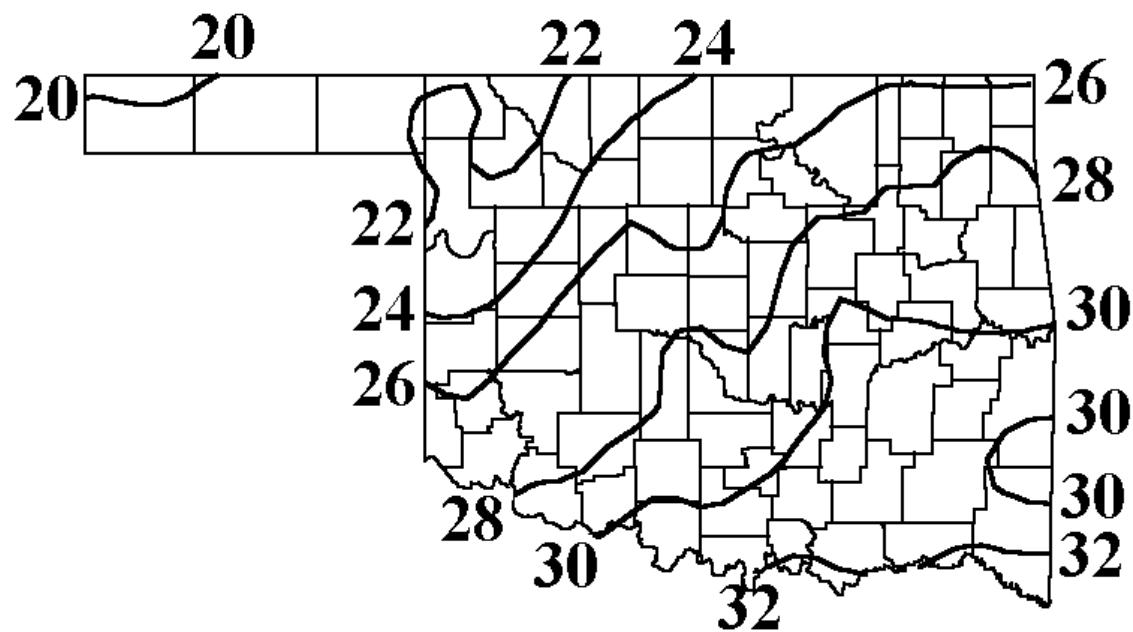
OCTOBER 2002 STATEWIDE EXTREMES

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature (F)	Goodwell	1	23	30
Maximum temperature (F)	Webbers Fall	6	95	6
Maximum 24-hour Precipitation	Cherokee	2	8.5	3

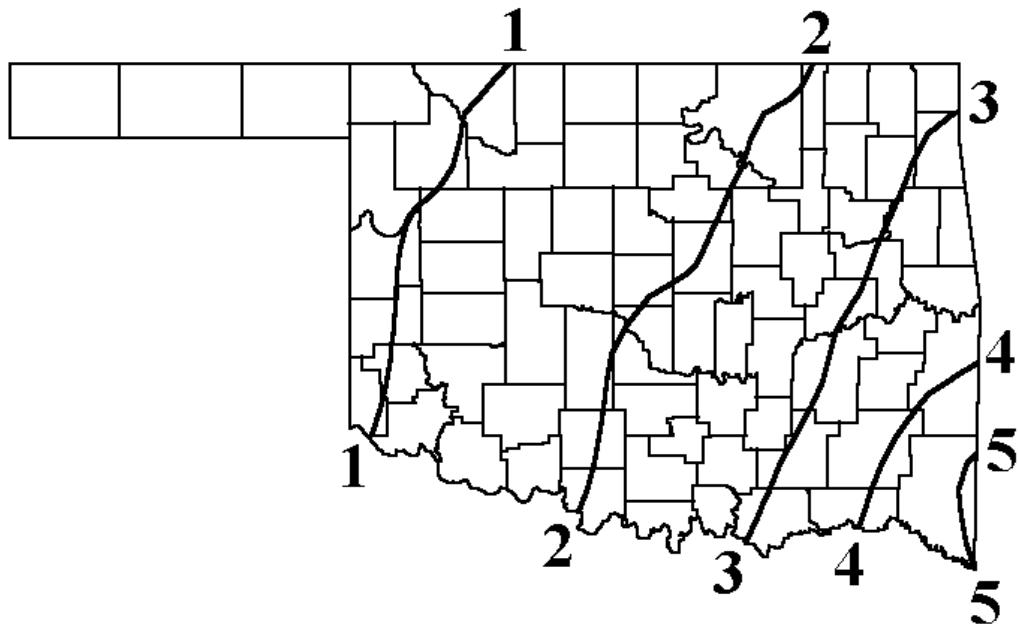
DECEMBER NORMAL DAILY MAXIMUM TEMPERATURE (°F)



DECEMBER NORMAL DAILY MINIMUM TEMPERATURE (°F)



DECEMBER NORMAL MONTHLY PRECIPITATION (INCHES)



DECEMBER TORNADO STATISTICS

The most tornadoes reported in **DECEMBER** for Oklahoma was (4) in 1982.

The average number of tornadoes in **DECEMBER** for Oklahoma is (0.4).

OUTLOOK FOR DECEMBER 2002 THROUGH JANUARY 2003 BASED ON SEASONAL OUTLOOK PROVIDED BY THE CLIMATE PREDICTION CENTER

Temperature: Above Normal Temperature Statewide

Precipitation: Above Normal Precipitation Statewide

OKLAHOMA CITY CLIMATE CALENDAR

DECEMBER

The data on this calendar are for Oklahoma City, Oklahoma.
 Normal values are calculated for the period 1961-1990.
 Temperature extremes are for the period 1905-2001.
 Precipitation extremes are for the period 1888-2001.

Day	Avg. Temp.	Ave. High	2002	Record High	Year	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	44	54		76	1982	20	1985	33		57	1933	12	1985	0.05		0.60	1913
2	43	54		77	1975	20	1919	32		56	1951	10	1985	0.05		1.59	1953
3	43	53		77	1916	15	1897	32		54	1913	6	1897	0.05		1.39	1947
4	43	53		75	1954	25	1972	32		60	2001	6	1897	0.05		2.59	1930
5	42	53		77	1975	31	1992	31		59	1980	9	1950	0.05		1.00	1935
6	42	52		77	1939	19	1972	31		63	1980	4	1950	0.05		2.78	1892
7	42	52		80	1966	19	1909	31		54	1894	5	1950	0.05		1.23	1980
8	41	52		71	1970	17	1917	30		61	1946	1	1917	0.05		1.00	1956
9	41	52		73	1915	15	1919	30		56	1946	3	1919	0.05		1.93	1911
10	41	51		75	1996	22	1917	30		58	1965	3	1919	0.05		1.06	1960
11	40	51		75	1939	21	1961	30		52	1991	5	1917	0.05		1.37	1991
12	40	51		73	1973	17	1932	29		45	1991	6	1932	0.05		1.33	1892
13	40	50		79	1921	17	1958	29		62	1929	4	1917	0.05		1.80	1984
14	39	50		74	1933	10	1901	29		64	1948	-2	1901	0.05		1.37	1902
15	39	50		75	1948	19	1901	29		59	1929	3	1989	0.05		1.53	1984
16	39	50		73	1939	21	1932	28		56	1929	7	1989	0.05		0.56	1931
17	39	49		75	1939	21	1964	28		45	1939	2	1979	0.04		1.68	1959
18	38	49		69	1982	19	1983	28		47	1939	4	1924	0.04		2.20	1898
19	38	49		75	1978	8	1924	28		54	1978	-2	1924	0.04		1.97	1991
20	38	49		73	1966	15	1924	27		51	1890	2	1924	0.04		1.43	1991
21	38	48		68	1966	11	1983	27		53	1894	-2	1983	0.04		1.26	1907
22	38	48		75	1896	4	1889	27		55	1893	-4	1889	0.04		2.01	1932
23	37	48		72	1982	10	1983	27		57	1965	-8	1889	0.04		1.80	1932
24	37	48		86	1955	3	1983	27		54	1893	0	1983	0.04		1.47	1914
25	37	48		73	1922	13	1983	26		49	1936	-1	1983	0.04		1.05	1987
26	37	48		68	1968	18	1892	26		56	1936	2	1892	0.04		1.15	1940
27	37	47		75	1946	15	1894	26		56	1946	3	1924	0.04		1.06	1927
28	37	47		73	1947	21	1925	26		59	1984	-1	1924	0.04		1.85	1979
29	36	47		77	1951	12	1917	26		60	1992	3	1983	0.04		0.23	1972
30	36	47		74	1951	14	1990	26		55	1965	3	1990	0.04		0.40	1899
31	36	47		80	1951	10	1927	26		55	1965	1	1968	0.04		2.55	1984
MONTH	39.3	49.9		86	1955	3	1983	28.6		64	1948	-8	1989	1.40		2.78	1892

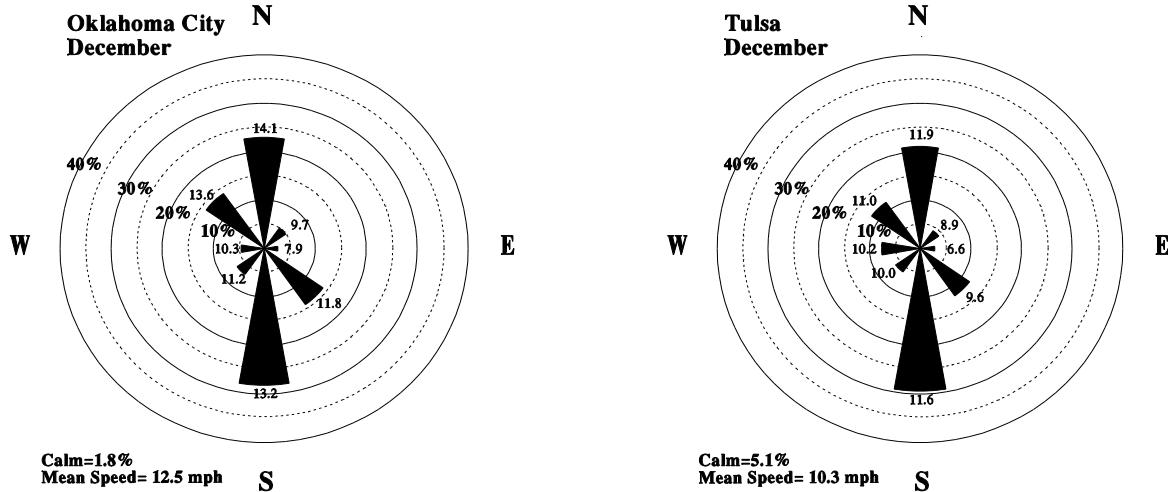
DATA COURTESY OF NATIONAL WEATHER SERVICE – NORMAN
 Temperatures are in degrees Fahrenheit; precipitation is in inches.

TULSA CLIMATE CALENDAR
DECEMBER

Day	Avg. Temp.	Ave. High	Record High	2002	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	44	54	77	1950	26	1985	34		59	1982	14	1985	0.10		1.48	1909
2	43	53	76	1995	24	1985	34		58	1951	11	1985	0.10		1.40	1913
3	43	53	77	1916	27	1919	34		60	1998	15	1929	0.10		1.12	1999
4	43	53	77	1906	27	1972	33		61	2001	20	1945	0.10		1.65	1999
5	42	52	77	1989	32	1992	32		61	1980	10	1950	0.09		1.14	1913
6	42	52	77	1966	18	1972	32		64	1980	3	1950	0.09		1.65	1935
7	42	52	80	1966	19	1909	32		55	1916	4	1950	0.09		1.48	1926
8	42	51	73	1991	19	1909	32		61	1946	-3	1917	0.09		1.01	1956
9	41	51	75	1993	22	1937	31		58	1946	0	1917	0.09		1.71	1999
10	41	51	74	1996	22	1917	31		56	1996	3	1919	0.09		1.73	1960
11	41	51	76	1929	27	1917	31		53	1929	4	1917	0.08		0.87	1946
12	40	50	73	1924	19	1932	30		51	1939	3	1962	0.08		1.82	1923
13	40	50	80	1948	19	1917	30		54	1927	4	1917	0.08		2.33	1984
14	40	50	74	1933	20	1926	30		64	1948	4	1958	0.08		3.02	1971
15	40	50	77	1948	19	1951	30		58	1929	-1	1989	0.08		0.72	1930
16	39	49	77	1908	15	1932	29		52	1929	3	1989	0.08		1.46	2001
17	39	49	78	1908	23	1964	29		61	1908	2	1932	0.08		1.00	1959
18	39	49	72	1939	23	1981	29		48	1939	4	1964	0.07		0.85	1934
19	39	49	70	1967	9	1983	29		55	1978	-1	1924	0.07		1.90	1987
20	39	48	75	1966	17	1924	29		49	1967	3	1924	0.07		1.44	1991
21	38	48	70	1979	15	1916	28		48	1941	0	1989	0.07		1.03	1997
22	38	48	71	1982	7	1989	28		55	1979	-6	1989	0.07		1.51	1966
23	38	48	73	1982	9	1983	28		60	1982	-8	1989	0.07		4.23	1932
24	38	48	80	1955	5	1983	28		54	1982	-2	1983	0.07		2.80	1965
25	38	47	73	1922	12	1983	28		51	1971	-2	1983	0.07		1.29	1987
26	37	47	69	1971	23	1983	27		57	1936	9	1914	0.07		0.97	1987
27	37	47	77	1946	27	1915	27		55	1946	8	1925	0.06		1.62	1943
28	37	47	74	1928	20	1917	27		62	1984	0	1924	0.06		0.98	1927
29	37	47	71	1984	12	1917	27		52	1992	3	1983	0.06		0.84	1971
30	37	47	77	1951	20	1946	27		58	1965	2	1983	0.06		0.36	1922
31	37	47	78	1951	18	1927	27		54	1965	0	1969	0.06		3.27	1984
MONTH	39.7	49.6	80	1966	5	1983	29.8		64	1980	-8	1989	0.08		4.23	1932

DATA COURTESY OF NATIONAL WEATHER SERVICE – TULSA
Temperatures are in degrees Fahrenheit; precipitation is in inches.

DECEMBER WIND ROSES



December Wind Roses for Oklahoma City and Tulsa. The frequency (percent) of winds from each direction is represented by length of its bar. The numbers at the ends of the bars indicate the average wind speed from that direction in miles per hour.

DECEMBER SUNRISE/SUNSET TIMES FOR 2002

ALL TIMES ARE CENTRAL STANDARD TIME

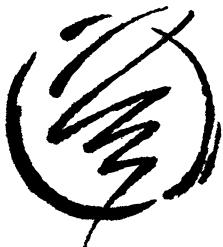
OKLAHOMA CITY

DATE	SUNRISE	SUNSET
12/1/02	7:21 AM	5:17 PM
12/2/02	7:22 AM	5:17 PM
12/3/02	7:23 AM	5:17 PM
12/4/02	7:24 AM	5:17 PM
12/5/02	7:24 AM	5:17 PM
12/6/02	7:25 AM	5:17 PM
12/7/02	7:26 AM	5:17 PM
12/8/02	7:27 AM	5:17 PM
12/9/02	7:28 AM	5:17 PM
12/10/02	7:28 AM	5:17 PM
12/11/02	7:29 AM	5:18 PM
12/12/02	7:30 AM	5:18 PM
12/13/02	7:31 AM	5:18 PM
12/14/02	7:31 AM	5:18 PM
12/15/02	7:32 AM	5:19 PM
12/16/02	7:33 AM	5:19 PM
12/17/02	7:33 AM	5:19 PM
12/18/02	7:34 AM	5:20 PM
12/19/02	7:34 AM	5:20 PM
12/20/02	7:35 AM	5:21 PM
12/21/02	7:35 AM	5:21 PM
12/22/02	7:36 AM	5:22 PM
12/23/02	7:36 AM	5:22 PM
12/24/02	7:37 AM	5:23 PM
12/25/02	7:37 AM	5:23 PM
12/26/02	7:38 AM	5:24 PM
12/27/02	7:38 AM	5:25 PM
12/28/02	7:38 AM	5:25 PM
12/29/02	7:39 AM	5:26 PM
12/30/02	7:39 AM	5:27 PM
12/31/02	7:39 AM	5:27 PM

TULSA

DATE	SUNRISE	SUNSET
12/1/02	7:16 AM	5:09 PM
12/2/02	7:17 AM	5:09 PM
12/3/02	7:18 AM	5:09 PM
12/4/02	7:19 AM	5:09 PM
12/5/02	7:20 AM	5:09 PM
12/6/02	7:21 AM	5:09 PM
12/7/02	7:21 AM	5:09 PM
12/8/02	7:22 AM	5:09 PM
12/9/02	7:23 AM	5:09 PM
12/10/02	7:24 AM	5:09 PM
12/11/02	7:25 AM	5:09 PM
12/12/02	7:25 AM	5:10 PM
12/13/02	7:26 AM	5:10 PM
12/14/02	7:27 AM	5:10 PM
12/15/02	7:27 AM	5:10 PM
12/16/02	7:28 AM	5:11 PM
12/17/02	7:29 AM	5:11 PM
12/18/02	7:29 AM	5:12 PM
12/19/02	7:30 AM	5:12 PM
12/20/02	7:30 AM	5:12 PM
12/21/02	7:31 AM	5:13 PM
12/22/02	7:31 AM	5:13 PM
12/23/02	7:32 AM	5:14 PM
12/24/02	7:32 AM	5:15 PM
12/25/02	7:33 AM	5:15 PM
12/26/02	7:33 AM	5:16 PM
12/27/02	7:33 AM	5:16 PM
12/28/02	7:34 AM	5:17 PM
12/29/02	7:34 AM	5:18 PM
12/30/02	7:34 AM	5:18 PM
12/31/02	7:35 AM	5:19 PM

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